

Application No.: 09/854197

Docket No.: SYCS-005

REMARKS

Claims 7-20 are pending in the application of which claims 7, 14 and 16(as amended herein) are independent. Applicants have amended claim 16.

Indication of Allowed Claims

Applicant notes and thanks the Examiner for the indication of the allowance of claims 7-13.

Objected to Claims

The Examiner objected to claims 16-19 as being dependent upon a rejected base claim but indicated that they would be allowable if re-written in independent form incorporating the limitations of the base claim and any intervening claim. Applicants have amended claim 16 to include the provisions of claims 14 and 15 and believe all of the objected to claims to now be in condition for allowance.

Claim Rejection Pursuant to 35 U.S.C §103(a)

Claims 14-15 were rejected by the Examiner as being unpatentable for obviousness over Takatori et al (U.S. Patent No. 5,550,805, hereafter "Takatori"). For the reasons set forth below, Applicants respectfully traverse these rejections.

Summary of Claimed Invention

The claimed invention provides a method to configure network topologies, such as mesh networks, into a virtual ring-based topology. The claimed invention provides a protection scheme utilizing shared protection bandwidth for the virtual ring. The shared protection bandwidth results in lower operating costs for the networks. The claimed invention provides a method of reconfiguring the nodes into a virtual ring solely through the use of software. Traffic providers are able to experience a higher comfort level of dealing with a familiar ring topology

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while receiving the greater efficiencies available from the transparent mesh topology. Additionally, a method for recovery from path failure within the virtual ring, which recalculates the paths inside the virtual ring around the failure, is provided.

Summary of Takatori

Takatori discusses a method of constructing a network capable of self-healing from a failure in a mesh network. A logical ring is set for each closed loop in the network and when a failure is detected, the traffic is re-routed in the opposite direction on a restoration route. Each logical ring is divided into two with one part designated a working path and the other as a backup path. Upon the failure being detected, the backup path in the logical ring is utilized.

Argument

The Examiner's attention is respectfully directed to the discussion on page 9 of Applicants' specification, lines 3-18 discussing a difference between Applicants' invention and conventional methods of configuring protection bandwidth in BLSR rings. One aspect of the Applicants' invention is that a one-to-one protection bandwidth is not required in order to guarantee QOS. Rather, optical fibers not being used in the virtual ring are designated as shared bandwidth(see page 9 of specification, lines 7-10). The final element of Applicants' independent claim 14 reflects this difference and reads:

"configuring the virtual ring so as to assign a protection trunk to more than one calculated path through the virtual ring".[emphasis added]

The limitation indicates that the protection trunk is assigned to more than one path within the virtual ring with virtual ring listed as singular. The Examiner cited the discussion of Figure 4 in Takatori as revealing this element. However, the cited section is discussing a restoration path through multiple virtual rings (logical rings 1, 2 and 4), not the assigning of a protection trunk to multiple paths within a single ring. The cited procedure in Takatori is therefore fundamentally different from that required by Applicants' independent claim 14. Accordingly, Applicants request the withdrawal of the rejections directed to claims 14-15.

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Claim Rejection Pursuant to 35 U.S.C §103(a)

Claim 20 was rejected by the Examiner as being unpatentable for obviousness over Takatori in view of Pegrum et al (U.S. Patent No. 6,490,244, hereafter "Pegrum"). For the reasons set forth below, Applicants respectfully traverse this rejection.

The Examiner cited Pegrum as disclosing a virtual ring contained within a single OSPF area. However, Pegrum does not supply the missing limitation from independent claim 14, upon which claim 20 is based. Accordingly, since claim 20 includes all of the limitations of the underlying independent claim 14 and as combination of references fails to teach or suggest all of those claim elements, Applicants request the withdrawal of the rejection directed to claim 20.

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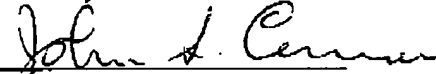
CONCLUSION

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Applicants believe no fee is due with this statement. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. SYCS-005 from which the undersigned is authorized to draw.

Dated: September 2, 2005

Respectfully submitted,

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